FIG. 4 is a chart showing a heat control member or battery thermal management member controlling time-to-temperature behavior according to certain embodiments disclosed herein;

FIG. 5 is an exemplary heat control member or battery thermal management member according to certain embodiments disclosed herein;

FIG. 6 schematically illustrates a heat control member or battery thermal management member according to certain embodiments disclosed herein;

FIG. 7 schematically illustrates a heat control member or battery thermal management member according to certain embodiments disclosed herein;

FIG. 7 schematically illustrates a heat control member or battery thermal management member according to certain embodiments disclosed herein;

FIG. 8 schematically illustrates a heat control member or battery thermal management member according to certain embodiments disclosed herein.

FIG. 9 schematically illustrates a heat control member or battery thermal management member according to certain embodiments disclosed herein;

FIG. 10 schematically illustrates a heat control member or battery thermal management member according to certain embodiments disclosed herein.

FIG. 11 schematically illustrates a heat control member or battery thermal management member according to certain embodiments disclosed herein.

DETAILED DESCRIPTION

In the following detailed description of the preferred embodiments, reference is made to the accompanying drawings, which form a part thereof, and within which are shown by way of illustration specific embodiments by which the invention may be practiced. It is to be understood that other embodiments may be utilized and structural changes may be made without departing from the scope of the invention.

As used in this specification and the appended claims, the singular forms “a”, “an”, and “the” include plural referents unless the content clearly dictates otherwise. As used in this specification and the appended claims, the term “or” is generally employed in its sense including “and/or” unless the context clearly dictates otherwise.

As used herein, “about” means approximately or nearly and in the context of a numerical value or range set forth means ±5% of the numerical. In an embodiment, the term “about” can include traditional rounding according to significant figures of the numerical value. In addition, the phrase “about ‘x’ to ‘y’” includes “about ‘x’ to about ‘y’”.